## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## LISTING OF CLAIMS:

1-32. (cancelled)

- 33. (currently amended) A powdered material, the binder phase of which essentially consists of a cement system, which powdered material has the capacity, following saturation with a hydration liquid, to hydrate to a chemically bonded ceramic material, eharacterised in that wherein said powdered material comprises a first part component which has the ability, together with a second part component not comprised in said powdered material comprised in a hydration liquid, to form an organic phase in the form of a polymer selected from the group that consists consisting of polymers based on hydrophilic or partially hydrophilic acrylate, carbonate, protein, cellulose, siloxane, polyacetal, collagen, elastin, and polyester.
- 34. (currently amended) [[A]] The powdered material according to claim 33, characterised in that wherein the binder phase is a ceramic powder selected from the group that consists consisting of aluminates, silicates, phosphates, sulphates and combinations thereof.

- 35. (currently amended) [[A]] The powdered material according to claim 34, characterised in that wherein the binder phase [[is]] has cations selected from the group consisting of Ca, Sr and Ba.
- 36. (currently amended) [[A]] The powdered material according to claim 35, characterised in that wherein said first part component is a monomer selected from the group that consists consisting of monomers of hydrophilic methacrylate type, HEMA, monomers having phosphate groups, alkenoids, monomers for carbopolymers, diols, and diacids.
- 37. (currently amended) [[A]] <u>The</u> powdered material according to claim 33, characterised in that wherein it exists in the form of granules of powder particles, which granules exhibit a degree of compaction above 55 % and a mean size of 30 250  $\mu$ m.
- 38. (currently amended) [[A]] The powdered material according to claim 37, characterised in that wherein said granules exist in a composition that comprises up to 50 % non pre-compacted powdered material, of the same cement-based system as the powdered material in the granules.

Docket No. 1510-1099 Appln. No. 10/518,083

- 39. (currently amended) An aqueous hydration liquid for hydration of a powdered ceramic material according to claim 33 to a chemically bonded ceramic material, characterised in that wherein said hydration liquid comprises a second part component which has the ability, together with a first part component comprised in said powdered material, to form an organic phase in the form of a polymer.
- 40. (currently amended) [[A]] The hydration liquid according to claim 39, characterised in that wherein said second part component is a polymer selected from the group that consists consisting of polymers based on hydrophilic or partially hydrophilic acrylate, carbonate, protein, cellulose, siloxane, polyacetal, collagen, elastin, and polyester.
- 41. (currently amended) [[A]] The hydration liquid according to claim 39, characterised in that wherein said second part component is a monomer selected from the group consisting of monomers of hydrophilic methacrylate type, HEMA, monomers having phosphate groups, alkenoids, monomers for carbopolymers, diols, diacids, and amino acids.
- 42. (currently amended) [[A]] <u>The</u> hydration liquid according to claim 40, characterised in that wherein said

Docket No. 1510-1099 Appln. No. 10/518,083

second part component is a monomer selected from the group that consists consisting of diacids [[or]] and aminoacids.

- 43. (currently amended) A chemically bonded ceramic material, the binder phase of which essentially consisting essentially of an inorganic cement phase, which ceramic material is in situ-formed on a substrate or in a cavity, characterised in that wherein said material also comprises an situ-formed polymer selected from the group that consists consisting of polymers based on hydrophilic or partially hydrophilic acrylate, carbonate, protein, cellulose, siloxane, polyacetal, collagen, elastin, and polyester.
- 44. (currently amended) [[A]] The ceramic material according to claim 43, characterised in that wherein its binder phase is a calcium-containing ceramic powder in the group that consists consisting of aluminates, silicates, phosphates, sulphates and combinations thereof.
- 45. (currently amended) [[A]] The ceramic material according to claim 43, characterised in that wherein its binder phase has cations selected from the group consisting of Ca, Sr and Ba.

- 46. (currently amended) [[A]] The ceramic material according to claim 43, characterised in that wherein the inorganic cement phase constitutes 50 % by volume or more of the ceramic material.
- 47. (currently amended) [[A]] The ceramic material according to claim 43, characterised in that wherein the organic phase exists as a phase that is non-communicating with the inorganic cement phase, such as separate areas.
- 48. (currently amended) [[A]] The ceramic material according to claim 43, characterised in that wherein the organic phase exists as a network or as separate areas in the inorganic cement phase.
- 49. (currently amended) [[A]] The method of producing a ceramic material according to claim 43 which comprises an organic phase in the form of a polymer, characterised by comprising the steps of:

adding—a—second part component, being a monomer selected from the group consisting of monomers of hydrophilic methacrylate type, HEMA, monomers having phosphate groups, alkenoids, monomers for carbopolymers, diols, diacids, amino acids, to

mixing a powdered material, comprising a first part component, selected from the same group of monomers, with a hydration liquid comprising a second part component, and

[[-]] if necessary, initiating a polymerisation reaction between the first and second part components,

whereby the first and second part components together form an organic phase, in the form of a polymer.

## 50. (cancelled)

- 51. (currently amended) [[A]] The method of producing a ceramic material according to claim 49, characterised in that wherein the polymer is formed by co-polymerisation in situ.
- 52. (currently amended) [[A]] The method of producing a ceramic material according to claim 49, characterised in that wherein the polymer is formed by condensation polymerisation in situ.

## 53. (cancelled)

54. (currently amended) [[A]] The method according to claim 49, eharacterised in that wherein the polymerisation reaction is chemically, photo- or thermochemically initiated.

Docket No. 1510-1099 Appln. No. 10/518,083

- claim 49, characterised in wherein the hydration and polymerisation reactions not being allowed to give a temperature exceeding 50 °C, in the material, which temperature control is effected by bringing the organic phase to form a network or separate areas in the inorganic cement phase and/or allowing the organic phase to constitute no more than 50 % by volume of the material.
- 56. (currently amended) [[A]] The method according to claim 49, characterised in that wherein said powdered material initially is compacted to a degree of compaction above 55 %, where after it is finely divided into granules of powder particles, which granules exhibit a mean size of 30 250  $\mu$ m.
- 57. (currently amended) [[A]] The method according to claim 56, characterised in that wherein said granules are mixed with up to 50 % of non pre-compacted powdered material of the same cement-based system as the powdered material in the granules.
- 58. (currently amended) [[A]] The method according to claim 56, characterised in that wherein the material is compacted to a raw compact that exhibits an average degree of compaction above 55 %.

- 59. (currently amended) [[A]] The method according to claim 57, characterised in that wherein the material is suspended in a liquid that reacts with the binder phase, where after the resulting suspension/paste is drained and compacted before the material is allowed to harden by reaction between the binder phase and any liquid remaining, which compaction is done to a degree of compaction above 55 %.
- 60. (currently amended) [[A]] The method according to claim 57, characterised in that wherein a hydration liquid is mixed with the granules by rolling, kneading or hand pressing such that a paste is formed, which paste is applied in a designated void.
- 61. (currently amended) [[A]] The method according to claim 60, characterised in that wherein the paste is applied by packing or squirting into the void.
- 62. (currently amended) A kit—or system for producing a chemically bonded ceramic material, characterised in that wherein it comprises a powdered material according to claim 33 and a hydration liquid a second part component which has the ability, together with a first part component comprised in said powdered material, to form an organic phase in the form of a

polymer, and optionally an initiator for initiating the reaction between the first and second part components.

63-66. (cancelled)